

Remarks/Arguments

The Non-Final Office Action mailed February 13, 2004 has been received and carefully considered. Claims 1 - 6 and 9 - 17 are pending in the application.

Claims 1 - 3, 5 - 6, 9 - 10 and 14 - 17 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Winter (U.S. Patent No. 6,678,008, hereinafter "Winter") in view of Chung et al. (U.S. Patent No. 6,507,696, hereinafter "Chung"). Claim 4 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Winter in view of Chung as applied to Claim 1 and further in view of Arai et al. (EP 0 921 682, hereinafter "Arai"). Claims 11 - 12 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Winter in view of Chung as applied to Claim 10 and further in view of Yanagihara et al (U.S. Patent No. 6,211,800, hereinafter "Yanagihara"). Claim 13 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Winter in view of Chung as applied to Claim 10 and further in view of Suzuki (U.S. Patent No. 6,344,836, hereinafter "Suzuki"). Applicants respectfully traverse the rejections.

The present invention is for a system and method for transmitting, decoding and displaying data channel information in a format that permits enhanced graphics functionality. In particular, non-text information such as complex graphics or animation generally could not be decoded and displayed using the OSD functions of the MPEG decoder. The present invention parses and routes the MPEG data packets to a MPEG decoder and the DVD subpicture packets to a DVD subpicture controller. The DVD subpicture decoder generates a signal associated with a graphics display that can be overlaid on the video program. The signal generated by the DVD subpicture controller is a bitstream and may contain advertisements and the like as well as interactive graphics. The DVD subpicture bitstream is decoded by the DVD subpicture decoder, which generates a signal which corresponds to a graphics image. The graphics image is coupled to a video decoder, which combines the DVD subpicture graphics signal with the MPEG video signal. The DVD subpicture formatted bitstreams are used to, among other things, carry interactive program guide information for displaying hot regions, which are user selectable. In the present invention when a hot region is selected, a location in a frame buffer or in the MPEG stream for the beginning of a selected DVD subpicture bitstream is identified. That is, a pointer is mapped to a location within the DVD subpicture bitstream.

In contrast, Winter describes an apparatus for generating a digital video picture composed of a plurality of components and a method for providing graphics for display. The graphics information of Winter is limited to subtitles, status information or operating menus. See col. 2, lines 20 - 24. Status information in the secondary pictures of Winter may include simple graphics symbols such as "fast forward" and "rewind" symbols.

The Examiner then points to Chung, which describes a method and apparatus for displaying DVD and/or application data by detecting selection of a user interaction request that is requesting the display of a DVD subpicture or an application subpicture. See col. 2, lines 6 - 13, lines 20 - 23, lines 51 - 55 and col. 4, lines 9 - 10, lines 23 - 26, lines 40 - 42, lines 46 - 48.

As recited in independent Claim 1:

receiving a bitstream including an MPEG compliant program bitstream and a DVD subpicture compliant bitstream;

extracting and decoding the MPEG compliant bitstream to generate a program image signal;

extracting and decoding the DVD subpicture compliant bitstream to generate a graphic image signal; and

combining the program image signal and the graphic image signal to provide an output display signal, wherein the DVD subpicture compliant bitstream comprises an interactive graphic having selectable regions that, when selected, causes the display of other DVD subpicture graphics associated with said subpicture compliant bitstream. (emphasis added)

As admitted by the Examiner, Winter fails to teach where the DVD compliant bitstream comprises an interactive graphic having selectable regions, that when selected, causes the display of other DVD subpicture graphics associated with the subpicture compliant bitstream. Chung describes no "interactive graphic having selectable regions". The Examiner then concludes that it would have been obvious "to one of ordinary skill in the art to incorporate the teaching of Chung into the system of Winter in order to provide an interactive DVD subpicture to enable the user to interact to retrieve additional information or data." However, the combination of Winter and Chung does not disclose or suggest that a "DVD subpicture compliant bitstream comprises an interactive graphic having selectable regions that, when selected, causes the display of other DVD subpicture graphics associated with said subpicture compliant bitstream" as recited in independent claim 1. Chung describes a user interaction request only. Such

combination with Winter, assuming arguendo a proper nexus of Chung with Winter, fails to disclose or suggest the aforementioned features of present independent claim 1, namely an interactive graphic having selectable regions that, when selected, causes the display of other DVD subpicture graphics associated with said subpicture compliant bitstream. For at least these reasons, applicants respectfully submit that independent claim 1 is patentable in a '103 sense over the combination of Winter and Chung.

As recited in independent Claim 10:

means for receiving a bitstream comprising a MPEG compliant bitstream and a DVD subpicture compliant bitstream;

means for parsing the received bitstream, and routing the MPEG compliant bitstream to a MPEG decoder, and routing the DVD subpicture compliant bitstream to a DVD subpicture processor, the MPEG decoder generating a program image signal in response to the MPEG compliant bitstream, the DVD subpicture processor generating a graphic image signal in response to the DVD subpicture compliant bitstream;

means for combining the program image signal and the graphic image signal to provide an output image signal; and

a display processor coupled to the combining means for displaying said output image, wherein the DVD subpicture compliant bitstream comprises an interactive graphic having selectable regions that, when selected, causes the display of other DVD subpicture graphics associated with said subpicture compliant bitstream. (emphasis added)

For similar reasons the combination of Winter and Chung does not expressly disclose the apparatus recited in independent claim 10 and highlighted above.

In light of the above remarks, it is respectfully submitted that claims 1 and 10 are non-obvious and patentable over the art of record. Claims 2 - 6 and 9 depend directly or indirectly from Claim 1. It is, therefore, respectfully submitted that Claims 2 - 6 and 9 are also non-obvious and patentable over the art of record for at least these reasons as well as additional features contained therein. Claims 11 - 17 depend directly or indirectly from Claim 10. It is, therefore, respectfully submitted that Claims 11 - 17 are also non-obvious and patentable over the art of record for at least these reasons as well as additional features contained therein.

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the

Examiner is invited to contact the applicant's attorney at (609) 734-6440, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,

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I hereby certify that this amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Assistant Commissioner for Patents [Box Amendments] Alexandria, VA on:	
<u>7/13/04</u> Date	<u>Jennifer L. Agins</u> Jennifer L. Agins